

ABSTRACT OF THE DISCLOSURE

An apparatus includes a roll condition detector detecting a roll condition of a vehicle and a lateral acceleration sensor sensing a lateral acceleration of the vehicle. The apparatus also includes a trip-over determination unit determining whether an anticipated rollover of the vehicle has a pattern of trip-over in response to the lateral acceleration and the roll condition of the vehicle, and a trip-over pattern recognition unit recognizing the pattern of trip-over based on the lateral acceleration of the vehicle. The apparatus further includes a rollover determination criteria unit setting a rollover determination criterion depending on the pattern of trip-over, a rollover determination unit determining whether the vehicle will roll over based on the roll condition of the vehicle and the rollover determination criterion, and an activation unit activating occupant restraint devices of the vehicle depending on a result of the rollover determination unit which indicates the vehicle will roll over.